



Toshiba PA3352x-1CD2

External CD-RW/DVD-ROM

Drive User's Guide

NOTE

Keep this guide in a convenient place to access important information about your external device.

If you need assistance, use one of the following:

- ❖ Toshiba Global Support Centre
Calling within the United States (800) 457-7777
Calling from outside the United States (949) 859-4273

Please fill in for your reference and future use:

Model name _____

Part number _____

Serial number _____

⚠ WARNING

Handling the cord on this product will expose you to lead, a chemical known to the State of California to cause birth defects or other reproductive harm. ***Wash hands after handling.***

FCC information

Product Name: Toshiba External CD-RW / DVD-ROM Drive

Model number: PA3352x-1CD2

FCC notice “Declaration of Conformity Information”

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ❖ Reorient or relocate the receiving antenna.
- ❖ Increase the separation between the equipment and receiver.
- ❖ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ❖ Consult the dealer or an experienced radio/TV technician for help.

NOTE

Only peripherals complying with the FCC class B limits may be attached to this equipment. Operation with non-compliant peripherals or peripherals not recommended by TOSHIBA is likely to result in interference to radio and TV reception. Shielded cables must be used between the external devices, USB port, and microphone jack. Changes or modifications made to this equipment, not expressly approved by TOSHIBA or parties authorized by TOSHIBA could void the user's authority to operate the equipment.

FCC conditions

This device complies with part 15 of the FCC Rules.
Operation is subject to the following two conditions:

- 1 This device may not cause harmful interference.
- 2 This device must accept any interference received, including interference that may cause undesired operation.

Contact:

TOSHIBA America Information Systems, Inc.

9740 Irvine Boulevard

Irvine, California 92618-1697

Telephone: (949)583-3000

EU Declaration of Conformity



TOSHIBA declares, that the product: PA3352x-1CD2
conforms to the following Standards:

Supplementary Information:

“The product complies with the requirements of the Low
Voltage Directive 73/23/EEC and the EMC Directive 89/336/
EEC and/or the R&TTE Directive 1999/05/EEC.”

This product is carrying the CE-Mark in accordance with the
related European Directives. Responsible for CE-Marking is
TOSHIBA Europe, Hammfelddamm 8, 41460 Neuss,
Germany.

VCCI Class B ITE

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。

TOSHIBA CD-RW/DVD-ROM drive SD-R2412 safety instruction

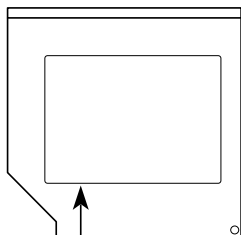
NOTE

The CD-RW/DVD-ROM drive employs a laser system. To ensure proper use of this product, please read this instruction manual carefully and retain for future reference. Should the unit ever require maintenance, contact an authorized service location.

Use of controls, adjustments or the performance of procedures other than those specified may result in hazardous radiation exposure.

To prevent direct exposure to the laser beam, do not try to open the enclosure.

Location of the required label



PRODUCT IS CERTIFIED BY THE
MANUFACTURER TO COMPLY
WITH DHHS RULES 21 CFR
SUBCHAPTER J APPLICABLE AT
THE DATE OF MANUFACTURE.

MANUFACTURED:

TOSHIBA CORPORATION
1-1, SHIBAURA 1-CHOME
MINATO-KU, TOKYO 105-8001,
JAPAN

CLASS 1 LASER PRODUCT
LASER KLASSE 1 PRODUKT
TO EN 60825-1
クラス1 レーザ 製品

CAUTION: This appliance contains a laser system and is classified as a “CLASS 1 LASER PRODUCT.” To use this model properly, read the instruction manual carefully and keep this manual for your future reference. In case of any trouble with this model, please contact your nearest “AUTHORIZED service station.” To prevent direct exposure to the laser beam, do not try to open the enclosure.

CLASS 1 LASER PRODUCT
LASERSCHUTZKLASSE 1
PRODUKT
TO EN60825

VORSICHT: Dieses Gerät enthält ein Laser-System und ist als “LASERSCHUTZKLASSE 1 PRODUKT” klassifiziert. Für den richtigen Gebrauch dieses Modells lesen Sie bitte die Bedienungsanleitung sorgfältig durch und bewahren diese bitte als Referenz auf. Falls Probleme mit diesem Modell auftreten, benachrichtigen Sie bitte die nächste “autorisierte Service-Vertretung”. Um einen direkten Kontakt mit dem Laserstrahl zu vermeiden darf das Gerät nicht geöffnet werden.

ADVERSEL: USYNLIG
LASERSTRÅLING VED ÅBNING,
NÅR SIKKERHEDSAF-BRYDER
ER UDE AF FUNKTION.
UNDGÅ UDSÆTTELSE FOR
STRÅLING

ADVARSEL: Denne mærkning er anbragt udvendigt på apparatet og indikerer, at apparatet arbejder med laserstråler af klasse 1, hvilket betyder, at der anvendes laserstråler af svageste klasse, og at man ikke på apparatets yderside kan blive udsat for utilladelig kraftig stråling.

**APPARATET BOR KUN ÅBNES AF
FAGFOLK MED SÆRLIGT KENDSKAB TIL
APPARATER MED LASERSTRÅLER!**

Indvendigt i apparatet er anbragt den her gengivne advarselsmærkning, som advarer imod at foretage sådanne indgreb i apparatet, at man kan komme til at udsætte sig for laserstråling.

OBS! Apparaten innehåller laserkomponent som avger laserstråling överstigande gränsen för laserklass 1.

VAROITUS. Suojakoteloä si saa avata. Laite sisältää laserdiodin, joka lähettää näkymätöntä silmilie vaarallista lasersäteilyä.

CAUTION: USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED IN THE OWNER'S MANUAL MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

VORSICHT: DIE VERWENDUNG VON ANDEREN STEURUNGEN ODER EINSTELLUNGEN ODER DAS DURCHFÜHREN VON ANDEREN VORGÄNGEN ALS IN DER BEDIENTUNGSANLEITUNG BESCHRIEBEN KÖNNEN GEFÄHRLICHE STRAHLENEXPOSITIONEN ZUR FOLGE HABEN.

Trademarks

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Windows and Microsoft are registered trademarks of Microsoft Corporation.

Photo CD is a trademark of Eastman Kodak.

iLINK is a trademark of Sony Corporation.

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Introduction

Thank you for purchasing a Toshiba External CD-RW/DVD-ROM drive. After installing the external drive, you can use it at any time by inserting the USB cable into your computer's USB port. This user's guide describes how to connect the external drive to your computer, install drivers and how to operate the drive. In addition to this user's guide, this package contains:

- ❖ External CD-RW/DVD-ROM drive
- ❖ USB cable
- ❖ AC adapter and power cord
- ❖ Manual CD-ROM
- ❖ NiMH Battery Pack
- ❖ Quick Start Card
- ❖ Warranty
- ❖ Instruction Manual for Safety and Comfort
- ❖ A Guide to Using Toshiba Products

System Requirements

To use the external drive, your computer must meet the following hardware requirements and run one of the operating systems listed below.

Hardware

- ❖ PC with an Intel® Pentium® II processor or equivalent, and a hard disk drive
- ❖ At least 64 MB RAM or higher, depending on the operating system
- ❖ USB 1.1 or USB 2.0
- ❖ A software DVD movie playback application is included with the Toshiba notebook. We recommend that you use this software a system with a Pentium® II 400 Mhz (or faster) CPU, and at least 64 MB RAM.

NOTE This drive is RPC (Regional Protection Coding) enabled. Your region will need to be set before DVD movies can be played.

Please note that the regional code may not be changed more than five times.

Operating System

- ❖ Microsoft® Windows® XP
- ❖ Microsoft® Windows® 2000

Media Formats

The External CD-RW/DVD drive reads formats according to the model CDs and/or DVDs which were written with the following standards:

- ❖ DVD ROM, DVD-RAM, DVD-R, DVD-RW
- ❖ DVD Video (see hardware requirements)
- ❖ CDI, CD-Midi, CD-R, CD-RW
- ❖ MS-DOS data CDs (High Sierra, Mode 1 & Mode 2 complying with ISO 9660)
- ❖ Data CDs (Joliet)
- ❖ CD ROM XA
- ❖ Mixed Mode CDs
- ❖ Photo CDs (single and multi-session)
- ❖ UDF (Universal Disc Format)
- ❖ Audio CDs

NOTE

Some special drivers may be required for these items.

Precautions and Operating Hints

The media tray can be opened by pressing the eject button.

Additionally, the tray can be opened without power being supplied to the drive, by inserting a small object, such as a straightened paper clip, into the manual eject hole on the front of the drive.

The External CD-RW/DVD-ROM drive should be operated in a horizontal position, and should not be moved while it is in use.

Operate the device at within the temperature range of 41° F to 95° F (5° C to 35° C).

If the device has been transported through a wide range of temperatures, allow time for the device to assume room temperature before trying to operate it, as moisture may have built up inside the device.

The External CD-RW/DVD-ROM drive should not be used in dusty and humid conditions.

Use only the original AC power adapter supplied with the External CD-RW/DVD-ROM drive. Using another adapter could damage your External CD-RW/DVD-ROM or its battery pack. Toshiba is not liable for damage if another adapter is used.

Do not operate the device near a heat source.

Allow the drive approximately 30 seconds to stop spinning after switching off the power before moving the drive.

Avoid contact with any liquids. Use a soft, and dust free cleaning cloth to clean the External CD-RW/DVD-ROM.

Use only the provided data and connection cables; otherwise, damage can occur to the battery pack and/or the drive.

Do not operate the device near a strong electromagnetic radiation source such as speakers or cell phones.

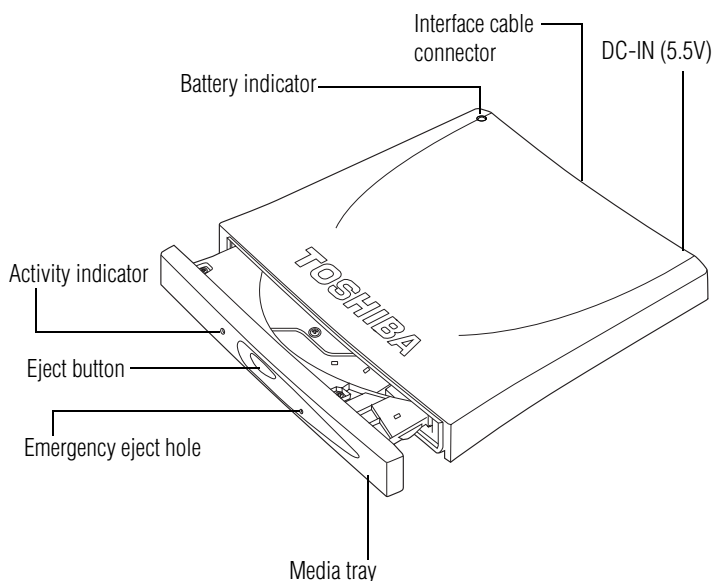
Only use the original battery pack provided with the External CD-RW/DVD-ROM drive.

During prolonged periods of storage, the battery pack should be removed from the drive.

Chapter 1

Device Description

The illustration below shows the features of the External CD-RW/DVD-ROM drive.



The External CD-RW/DVD-ROM drive major features

Chapter 2

Hardware Installation

Installing the battery pack

▲ WARNING

Before inserting the battery, make sure that the External CD-RW/DVD-ROM drive is disconnected from the external power supply. Otherwise the drive may be damaged.

For more information on purchasing additional batteries, visit toshiba.com.

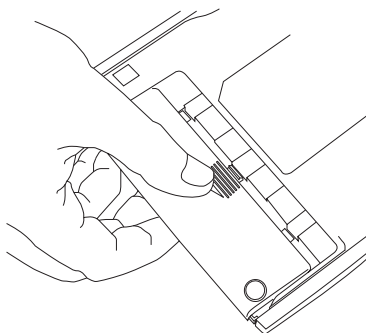
Inserting and removing the battery pack

▲ WARNING

Use only Toshiba battery packs since standard commercial batteries may cause damage to the device.

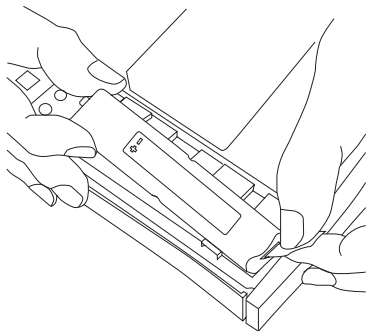
To insert the battery pack, use the following procedure:

- 1 Turn the External CD-RW/DVD-ROM drive over.
- 2 Remove the battery cover by pulling it toward the edge of the drive.



Removing the battery cover

- 3 Position the battery pack so that the lettering is facing up and the polarity indicators on the pack match up with the indicators on the drive case.
- 4 Insert the battery pack until it snaps into place.

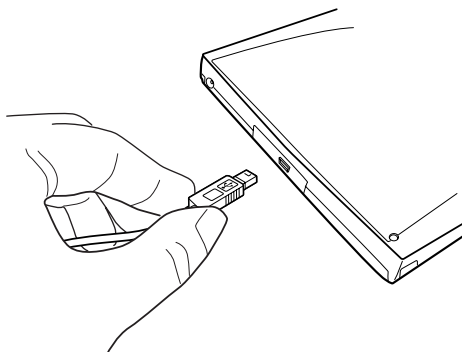


Inserting the battery pack

- 5 Replace the battery cover.

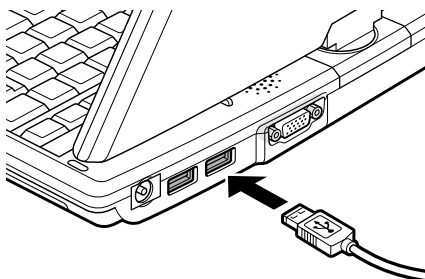
Connecting the External CD-RW/DVD-ROM Drive to the Computer

- 1 Turn on your computer (if it is not already on).
- 2 Attach the smaller connector of the USB cable to the external drive's interface cable connector.



Attaching the USB cable to the External CD-RW/DVD-ROM drive

- 3 Plug the other end of the USB cable to any USB port on your computer.

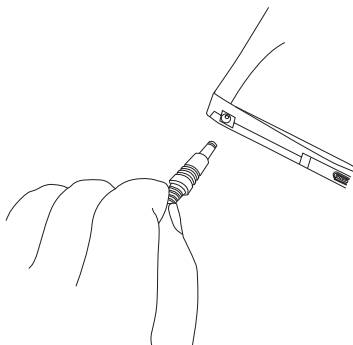


Inserting the USB cable into a USB port on the computer

18 Hardware Installation

- 4 Connect the supplied AC adapter to the AC power jack on the external drive and plug the adapter into a working power outlet.

NOTE Insert the battery pack before using the drive.



*Attaching the AC adapter to the external CD-RW/
DVD-ROM drive*

NOTE For the best results, charge the drive using the supplied AC adapter for at least one hour before connecting it to your computer and installing the driver software.

To work stably, the supplied AC adapter must be connected to the External CD-RW/
DVD-ROM drive in all conditions.

The driver for the USB device is automatically loaded by the operating system.

Chapter 3

Installing the Software Drivers

No special software is required to install your Toshiba External CD-RW/DVD-ROM drive. Your External CD-RW/DVD-ROM drive uses the Windows® Mass Storage driver already included in Windows®.

Chapter 4

Using the External CD-RW/DVD-ROM Drive

The following sections present how to use the External CD-RW/DVD-ROM drive.

Inserting and Removing a Disc

- 1 Turn on your computer and press the eject button to open the tray.
- 2 To insert a disc, hold it by the edges and place it in the tray with the readable (plain) side down. Then, gently press down on the disc until it snaps into place.
- 3 To remove a disc, grasp it by the edges and gently pull up until the disc is released.

CAUTION

Avoid touching the readable (plain) side(s) of a disc. Touching the readable side of the disc may cause read errors, poor performance or failed operation.

CAUTION

Do not press the eject button while the computer is accessing the disc. Wait for the activity indicator to go out before you open the Media tray. Also, if the disc is spinning when you open the tray, wait for it to stop before you remove it.

- 4 Close the media tray by gently pushing it until you hear it click into place.

If you need to remove a disc when there is no power to your computer, you can open the tray manually. To do this, gently insert a slim, straight object, such as a bent-open paper clip, into the emergency eject hole until you feel some resistance. Remove the paper clip and carefully open the tray by hand.

Playing Audio CDs

You can play audio CDs on your external drive by using the CD Player application included in the operating system. To hear the audio, you can either:

- ❖ Connect headphones or external speakers to the headphone jack on your notebook.
- ❖ Use the built-in speakers on your computer.

Reading Data DVDs

You can read data DVDs without installing any special software.

Playing DVD Movies

To play back movies, you must have a DVD player application set up under the Windows operating system. DVD playback software is included with your Toshiba notebook.

Writing to CD-R/CD-RW discs

This drive lets you write as well as read CD-ROMs. Observe the precautions in the introduction to ensure the best performance for writing CDs.

NOTE CD-R discs can be written to only once.
CD-RW discs can be rewritten many times.

Before writing or rewriting

Please observe the following points when you write or rewrite the data.

We recommend the following manufacturers of CD-R and CD-RW media. Media quality can affect write or rewrite success.

CD-R:	TAIYOYUDEN CO.,LTD. Mitsui Chemicals Inc. MITSUBISHI CHEMICAL CORPORATION RICOH Co., Ltd. Hitachi Maxell Ltd.
CD-RW:	MITSUBISHI CHEMICAL CORPORATION RICOH Co., Ltd.

TOSHIBA has confirmed the compatibility of CD-R and CD-RW media for the above manufacturers. The quality and compatibility of other media cannot be guaranteed.

- ❖ CD-RW can typically be rewritten about 1,000 times. However, the actual number of rewrites is affected by the quality of the media and the way it is used.
- ❖ Be sure to connect the AC adaptors for both the PC and the external drive when performing writing or rewriting.
- ❖ Be sure to close all other software programs except the writing software.
- ❖ Do not run software such as a screen saver which can task the CPU.
- ❖ Operate the computer at full power. Do not use power-saving features.
- ❖ Do not write while virus check software is running. Wait for it to finish, then disable virus detection programs including any software that checks files automatically in the background.
- ❖ Do not use hard disk utilities, including those intended to enhance HDD access speed. They may cause unstable operation and damage data.
- ❖ Write from the computer's HDD to the CD. Do not try to write from shared devices such as a LAN server or any other network device.
- ❖ Use the software that shipped with your Toshiba computer. The operation of other software cannot be guaranteed.

When writing or rewriting

Note the following when you write or rewrite a CD-R or CD-RW.

- ❖ Always copy data from the HDD to the CD. Do not use cut-and-paste or “move.” The original data will be lost if there is a write error.
- ❖ Do not perform any of the following actions:
 - ❖ Operate other computer functions, including use of a mouse or pointing device, closing/opening the LCD panel.
 - ❖ Start a communication application such as fax/modem software.
 - ❖ Apply impact or vibration to the PC.
 - ❖ Install, remove or connect external devices, including the following: PC card, USB devices, external display, i.LINK devices, optical digital devices.
 - ❖ Use the CD/DVD control buttons to reproduce music or audio/video files.
 - ❖ Open the optical media drive.
- ❖ If the media is poor in quality, dirty or damaged, writing or rewriting errors may occur.
- ❖ Set the computer on a level surface and avoid places subject to vibration such as airplanes trains, or cars. Do not use an unstable surface.
- ❖ Keep mobile phones and other wireless communication devices away from the computer

Disclaimer

TOSHIBA does not bear responsibility for the following:

- ❖ Damage to any CD-R/-RW disc that may be caused by writing or rewriting with this product.
- ❖ Any change or loss of the recorded contents of CD-R/-RW disc that may be caused by writing or rewriting with this product, or for any business profit loss or business interruption that may be caused by the change or loss of the recorded contents.
- ❖ Damage that may be caused by using third party equipment or software.

Given the technological limitations of current optical disc writing drives, you may experience unexpected writing or rewriting errors due to disc quality or problems with hardware devices. Also, it is a good idea to make two or more copies of important data, in case of undesired change or loss of the recorded contents.

Hot Swapping

You can connect and disconnect the external drive while the computer is running. To attach the external drive, just insert the USB cable into your computer's USB port. To remove the USB cable while the computer is turned on:

- 1 Double-click the **Safely Remove Hardware** icon for Windows XP, or double-click the **Unplug or Eject Hardware** icon for Windows 2000.
- 2 Click **Stop**, and then click **OK**.
- 3 After the message "The device can now be safely removed from the system" appears, you may remove the USB cable from your computer.

Chapter 5

Troubleshooting

If you have problems with your Toshiba External CD-RW/DVD-ROM drive, check the following:

- ❖ Check the Battery indicator. The indicator color means,
 - Green light: Battery good
 - Orange light: Battery low
 - No light: Battery down

CAUTION

Connect the External CD-RW/DVD-ROM drive to the AC adapter in any case.

- ❖ The cable is properly connected
- ❖ AC power is supplied to the External CD-RW/DVD-ROM drive
- ❖ System being used meets the hardware requirements needed for the drive (see “System Requirements” on page 10)
- ❖ Review whether requirements stated in the instructions on disk have been followed correctly

If audio playback does not work check the following:

- ❖ The speakers or headphones are properly connected
- ❖ The USB cable is firmly connected
- ❖ The speaker control on the amplifier or on the active speakers is properly set
- ❖ Audio software is correctly installed
- ❖ The volume level is properly set

If the computer suddenly cannot detect the External CD-RW/DVD-ROM drive

If you are operating the External CD-RW/DVD-ROM drive on battery power and the battery runs low, the computer will not be able to detect the Toshiba CD-RW/DVD-ROM drive, and there is no indication from the computer or on the Toshiba CD-RW/DVD-ROM drive that the battery is low. If this occurs:

- ❖ Connect the Toshiba CD-RW/DVD-ROM drive to the AC adapter. Toshiba does not guarantee operation without the AC adapter.

Disconnecting and reconnecting the DVD-ROM drive

If you detach the External CD-RW/DVD-ROM drive from the computer while it is running, and then reconnect it, the system may not recognize the External CD-RW/DVD-ROM drive. Restart the system for it to recognize the External CD-RW/DVD-ROM drive.

If you connect the External CD-RW/DVD-ROM drive to the computer while it is running and in hibernation mode, and then disconnect and reconnect the External CD-RW/DVD-ROM drive after resuming the system, the

computer may not recognize the External CD-RW/DVD-ROM drive. Restart the system for it to recognize the External CD-RW/DVD-ROM drive.

Operating Hints

- ❖ Use the emergency eject mechanism only if the external drive is not connected to your computer or if the computer's battery is discharged and there is no power available for the eject button. Excessive use of the emergency eject mechanism may damage it and cause the mechanism to stop working.
- ❖ Never press the eject button while the drive is accessing a disc.
- ❖ The external drive operates in a horizontal position. To prevent possible damage, avoid changing the drive's position while it is in use.
- ❖ Avoid using or storing the external drive in extreme temperatures. The environmental specifications while operating are 41° F to 95° F (5° C to 35° C).
- ❖ After transporting the external drive, allow it to reach room temperature before using it.

CAUTION

Changes in temperature during transport, particularly from a cool to a warmer temperature, can cause condensation to form in the drive and may result in operating problems. Allowing the drive to reach room temperature helps to prevent this.

- ❖ Avoid using the external drive in dusty or humid environments.

- ❖ A short delay is normal before the external drive reads an audio CD, CD-ROM, DVD, or DVD-ROM.

▲ WARNING

Never clean the external drive with a commercially available CD or CD-ROM cleaning set as doing so may cause damage to the drive.

Safety Measures

Any attempt to disassemble, adjust or repair the external drive may result in exposure to laser light or other safety hazards. This is a Class 1 Laser Product. This product complies with all applicable safety standards, DHHS Rules 21 CFR Chapter 1, Sub chapter J. The laser beam generated is totally enclosed during all modes of normal operation, and no hazardous laser light is emitted from the drive.

Contacting Toshiba

Please have the following information available when contacting Toshiba:

- ❖ Serial number of your Toshiba External CD-RW/DVD-ROM drive.
- ❖ Information available from the power supply
- ❖ Version number for operating system and software involved.
- ❖ Precise description of error and error messages that occur during operation.
- ❖ Name and model of your computer and any internal hardware.

- ❖ Notes on when the problem occurs and under what conditions.
- ❖ Notes on whether the problem has occurred before and how recently any system configuration changes have been made.
- ❖ Toshiba Global Support Centre
Calling within the United States:
(800) 457-7777
Calling from outside the United States:
(949) 859-4273

Specifications

Dimensions

Length: 5.8 inches (146 mm)

Width: 5.7 inches (145 mm)

Height: 1.0 inches (24 mm)

Weight

1.0 lbs (440 g)

Connection to the computer

USB 1.1 or USB 2.0

Voltage

DC + 5.5V \pm 5%

Maximum Speed

CD-ROM read: max 24x CD speed (3,600 KB/s)

DVD-ROM read: max 8x DVD speed (10,816 KB/s)

CD-R Record: max 24x speed (3,600 KB/s)

CD-RW Rewrite: max 10x speed (1,500 KB/s)

TOSHIBA